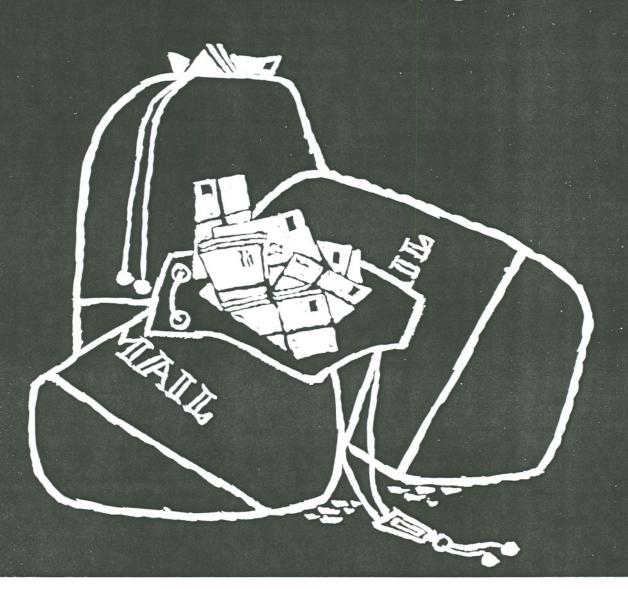
STATION AND AUDIENCE MEASUREMENTS



CHAPTER XV

STATION AND AUDIENCE MEASUREMENTS

An often forgotten aspect of an Armed Forces radio or television station is the measurement of its coverage and its audience. Measuring a station's coverage and impact on viewers or listeners is vital to its continuing effectiveness and it should not be overlooked by an otherwise energetic and competent staff.

The first step in measuring the size of an audience for a radio or television program is to determine the listening area of the broadcasting station. This type of survey, called a measurement of station coverage, defines the area in which the signal of a particular station can be heard. Coupled with a count of the population and the number of receivers, coverage information will tell how many people can hear or see the program if they all tune in.

The next step is to determine how many of the available audience actually hear or view a particular program. A number of methods have been worked out which arrive at this figure through the use of sampling techniques. In general, these measurements indicate the comparative popularity of a program in relation to others on the air, and from this the actual audience can be estimated.

MEASURING THE STATION'S COVERAGE

At first thought, it might seem that determining the area in which a particular station can be received is a comparatively simple problem, but when the vagaries of reception from day to day, interference by other stations, and the influence of weather and terrain are considered, it can be seen that even this measurement can be only an estimate. Three principal techniques are now in use. These methods are described in terms of radio, but they can also be applied to television.

FIELD STRENGTH SURVEY

This engineering method consists of taking a radio receiver out into the field to determine the listening area of a station. The strength of the signal coming from the transmitter is carefully measured at various points in the area surrounding the station. When this strength falls below a previously determined minimum strength, it is presumed that satisfactory reception will not take place. A circle or contour drawn through these points of minimum strength encloses the primary coverage area of the strength. In order to establish the secondary and testing coverage area the survey is continued beyond this point until the signal disappears entirely. A contour map summarizes the information by indicating in graphic form the various coverage boundaries.

MAIL ANALYSIS

A second method of determining coverage is to analyze the mail received by a station. Often the writing of letters and cards is motivated by special offers on certain programs. On the assumption that the station can be heard at all points from which mail is sent, the coverage of the station is indicated by plotting the most distant of them, then drawing a contour line.

It cannot be taken for granted, however, that because an occasional faraway listener hears a program, the station has coverage of the area. A rare atmospheric condition or an unusual set may have accounted for this reception.

THE BALLOT METHOD

This method has been used by the Broadcast Measurement Bureau, an organization established cooperatively by broadcasting Stations, networks and advertisers, specifically to gather coverage information. It sent ballots to listeners who were selected to represent the nation geographically, socially and economically, asking them which radio stations they listened to, when and in what proportion their listening was divided among the various stations. The Bureau then analyzed these responses to determine the various coverage areas of stations and networks for both day and night. Although the Broadcast Measurement Bureau is no longer in existence, studies similar to the type it made are being conducted by other organizations.

Note: Both the mail and ballot methods measure actual listening to a station, while the field strength survey merely indicates the station can be heard. To establish their coverage areas, most stations will correlate information gained from the use of all three methods.

MEASURING THE STATION'S AUDIENCE

Audience coverage information is used by commercial stations and networks to prove that programs broadcast from their facilities are potentially capable of gaining an audience of a certain size. Once an advertiser has decided to invest in a broadcast, his next concern is to know what percentage of his potential audience will actually take advantage of the opportunity, either to hear or see his program.

MAIL RESPONSE

The earliest method of determining the audience for a particular broadcast was to make an estimate, based on the number of letters sent in by listeners — the assumption being that the more letters received by a program, the larger the audience. Before the development of modern measurement systems, a letter was often the only tangible evidence that anyone was listening and the number of letters received by a particular program had a great deal to do with whether it stayed on the air.

Mail response is minimized by experts as an accurate measure of the audience because no one has ever been able to determine what proportion of the people tuned in actually write to stations. A large number of persons have never written a letter to a station in their lives. The general belief that fan mail writers tend, in general, to be a small and unrepresentative part of the population casts a doubt on the validity of the mail count as a measure. As a result, more accurate methods have replaced the counting of letters in larger stations and networks, but fan mail is, in many instances, still the basis for estimating the number of listeners to smaller stations.

TELEPHONE SURVEYS

Each year millions of telephone calls are made in the United States to estimate the size of the audience of various radio and television programs. The outstanding exponent of this method was the organization founded by C. E. Hooper, the originator of the coincidental telephone technique which measures the audience of a program through telephone calls while the program is actually on the air. People answering the telephone are asked what program, if any, they are receiving, the name of the sponsor and the station, and who is listening with them. The first step in the analysis of the data is to determine the percentage of radio or TV sets in use for a particular period. Of the number of sets actually operating, the number tuned to a particular program becomes the basis

for arriving at that program's share of the audience. In other words, this figure indicates the relative popularity of a particular program, as compared with other programs on the air at the same time.

PERSONAL INTERVIEW METHOD

This technique, used by such organizations as The Pulse, Inc., was developed in an effort to eliminate the errors inherent in a listener to recall programs without help; moreover, it could include other than telephone homes. The interviewer actually visits a home, bringing with him a list of programs broadcast in a previous period, in the hope that cueing the listener's memory will make his recall more accurate. However, when non-existent programs were put on the list by investigators, it was discovered that listeners remembered hearing these programs too. This discrepancy has tended to throw further doubt on the validity of any technique which depends on the memory for accuracy.

THE DIARY METHOD

By this method a group of listeners, or viewers, representing the audience as a whole, are paid to list radio and television programs as they tune in. The members of the panel obviously need not be restricted to telephone homes or to cities, as in the coincidental telephone surveys. Another advantage of the method is that it permits an analysis of the audience in terms of such factors as age, sex and income.

The accuracy of the diary method, of course, depends on how conscientiously an indivdual keeps track of his listening or viewing activity. If he forgets to make a record after each program and does it at one time for the whole day, the method becomes one based on undependable recall.

AUTOMATIC DEVICES

The Audimeter introduced into radio audience measurement by A.C. Nielsen Company, is the outstanding automatic measurement device. When installed in a radio or TV set, this instrument keeps a minute-by-minute record of the stations to which the receiver is tuned. Placed in every set of a house, the Audimeter accurately indicates the programs tuned in by an entire family.

In addition, the Nielsen Audimeter method records the "flow of listening" from one program to another, and thus may indicate the point at which a particular show loses a large number of listeners or viewers. This information can be used to improve the construction of the show at that point.

PRACTICAL APPLICATION

It is not the purpose of this chapter to enter the controversy regarding the relative merits of the various audience and coverage measurement techniques used by commercial broadcasters and advertisers. Their various methods have been briefly outlined merely for purposes of background study, and possible practical application in one form or another.

It should be obvious that automatic devices, such as the patented Audimeter, will not be available to Armed Forces Radio and Television Stations. It will be necessary, therefore, to adapt and adjust other methods, such as mailed questionnaires, personal interviews, and, in some instances, telephone surveys, to the situation at hand.

The paramount objective of any questionnaire or survey is to get facts.

Space here does not permit a lengthy discussion of audience research technique. The questionnaire survey, however, is so widely used that a brief outline of procedures is in order.

Questionnaire surveys are probably the most widely used and the most widely abused. A questionnaire is a list of questions for formal answers by the group from which information is desired. Questionnaire surveys can be made by mail, personal interviews, and by telephone.

If the local situation permits, telephone surveys can be effective and useful for determining relatively simple facts. It has been generally supposed that telephone interviews are severely limited in the number of questions that can be asked. With proper planning, however, on the part of the interviewer, a complete questionnaire of moderate length can be handled by telephone. This type of sampling, it must be remembered, has limitations, since it will, of necessity, eliminate segments of an audience without telephones.

THE QUESTIONNAIRE

Care is needed in preparing questionnaires, either for mailing or personal interviews, and the following more important rules should be used for guidance:

- 1. Ask only for data that is needed. Too often extraneous information is added, which only contributes to confusion and lessens the percentage of completed returns.
 - 2. Do not ask for information that is already available from other sources.
 - 3. Ask only for information that can be given by informants.
- 4. Word questions clearly so that anyone of normal intelligence will know the meaning on first reading.
- 5. Do not ask leading questions. Leading questions are, perhaps, the least excusable of the common mistakes.
 - 6. Ask for definite facts.
- 7. Frame questions that can be answered "yes" or "no," or with check marks. Such questions should contain, also, a "don't know" space or column.
 - 8. Make the questions simple. Put only one idea in a question.
 - 9. Prepare questions to follow in logical or conversational sequence.
 - 10. Do not ask for personal or confidential information.
- 11. Adjust length of questionnaire to information desired and type of informant. Mailed questionnaires usually should not exceed one page in length two pages, if taken by interviewers.
- 12. One or more free or opinion questions are permissible if they are pertinent to the questionnaire.

RADIO AND TELEVISION AUDIENCE PREFERENCE QUESTIONNAIRE (Sample)

The purpose of this survey is to obtain information on the listening and viewing habits and program preferences of U.S. Armed Forces personnel. We are also interested in obtaining information about other related activities, such as reading, movie-going and personal hobbies.

This information will help our program planners at this station and in the United States to secure and schedule more of the programs that you like. It will also assist al-

lied activities, such as the Special Service Office and the Post Exchange, in obtaining items of interest to you.

In order to determine if we have surveyed a representative cross-section of the Armed Forces, it is necessary to get a little information about the people who answer this questionnaire. In this way we will be able to tell whether all ranks, age groups, etc., are properly represented.

The information about you, of course, is retained on a confidential basis, and you will never be identified in any report of this survey.

INSTRUCTIONS

This questionnaire is divided into four parts:

- 1. INFORMATION
- 2. RADIO
- 3. TELEVISION
- 4. NEWS MEDIA

INFORMATION

Please answer all questions in terms of your personal likes and dislikes.

At times, you will be required to CHECK, CIRCLE or WRITE.

Pleast PRINT your answers.

Check $(\sqrt{\ })$ "Yes" and "No" answers.

Ratings: CIRCLE your preference.

WRITE your answer or comments; if your answer is "Other," specify.

NAME		AC	E	RANI	ζ		UNI	т		_
SINGLE MARRIED_	NO. OF	DEPEN	DENTS_	_ DA	TE A	RRIV	ED F	IERE		
What is highest grade of	schooling o	or equiva	lent that	you h	ave c	omplet	ted?			
1 2 3 4 5 6	7 8 9 1	10 11	12 13	14	15	16	17	18	19	20
WHAT ARE YOUR WO	ORKING HO	OURS?								
1 As needed		3	8 Nig	hts or	nly					
2 Days only		4	Nor	ie						
DO YOU HAVE										
1. A radio set?		_	Yes	_	N	O				
2. A radio set that you	u can use?		Yes	_	N	O				
3. A Hi Fi set?		_	Yes	_	N	0				
4. A Stereo Hi Fi set?		_	Yes	_	N	O				
5. A TV set?		_	Yes	_	N	O				
6. A TV set that you o	ean watch?		Yes		N	0				
7. A car radio?			Yes	_	N	O				
MOVIE GOING										
1. How many times p	er week do	you go to	the mov	ries?_						
2. Which of the following	owing perfor	rmances	do you ı	ısually	atte	nd?	_ Ma	tinee	;	1st
Eve Performance;		Perform.	; Ear	ly Bir	d					
3 I nover attend the							Pai	rform	ance	(0)

READING								
1. About how many hours per week do you spend reading?								
About how many hours per week do you spend reading NEWSPAPERS?NEWSPAPER TITLE								
3. About how many hours per week do you spend reading MAGAZINES?								
4. About how many hours per week do you spend reading BOOKS? TITLE OF LAST BOOK READ	About how many hours per week do you spend reading BOOKS?							
 Which types of reading material do you prefer? Non-fiction; Fiction Military reading; Other (specify) 	Which types of reading material do you prefer?Non-fiction; Fiction;							
6. Do you have a subscription to:								
aYesNo -Hometown or other newspaper. Title: bYes No -Magazine. Title:								
c. Yes No -Record club.	_							
WHICH OF THE FOLLOWING POST ACTIVITIES DO YOU ACTIVELY PARTIC	[-							
PATE IN?								
 Club Oasis, Top-5, Officers, and related activities to said clubs. Special Services Sports Program — Bowling League, etc. 								
3. — University of Maryland Courses.								
4. Correspondence courses.								
5Other (specify)								
HOBBIES								
 Do you have a hobby? Yes; No. What is it? 								
3. Does this post have facilities for you to actively participate in it?Yes;N	ο.							
COMMENTS								
Do you have any suggestions, recommendations, that would improve your mora	le							
while stationed here — gripes, etc.?								
RADIO								
The following questions pertain to radio. We would like you to answer these que	s-							
tions in terms of your particular likes and dislikes.								
1. How many hours per day do you listen to the radio?								
2. Do you listen to the radio while at work? Yes; No.								
3. Check the days and time that you listen to the radio:								
EARLY MORNING MORNING AFTERNOON EARLY EVES LATE EVE	S							
1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 1	12							
MON								
TUE								
WED								
THU								

FRI SAT SUN

4.	What is your favorite LOCALLY produced radio program?							
5.	What is your favorite NETWORK radio recorded program?							
6.		according to your personal preference. 5-best						
	5 4 3 2 1 CLASSICAL	5 4 3 2 1 OLD STANDARDS						
	5 4 3 2 1 SYMPHONIC	5 4 3 2 1 LATIN AMERICAN						
	5 4 3 2 1 OPERATIC	5 4 3 2 1 CHILDREN'S						
	5 4 3 2 1 CHAMBER	5 4 3 2 1 MILITARY						
	5 4 3 2 1 SEMI POPULAR	5 4 3 2 1 JAZZ (in general)						
	5 4 3 2 1 BROADWAY HITS	5 4 3 2 1 PROGRESSIVE JAZZ						
	5 4 3 2 1 ORCHESTRAL (Mantovani)							
	5 4 3 2 1 INSTRUMENTAL	5 4 3 2 1 FOLK						
	5 4 3 2 1 TOP 20	5 4 3 2 1 COUNTRY OR WESTERN						
	5 4 3 2 1 ROCK AND ROLL	5 4 3 2 1 RELIGIOUS						
	5 4 3 2 1 POLKA	5 4 3 2 1 SPIRITUALS						
	5 4 3 2 1 MOTION PICTURES	5 4 3 2 1 HYMNS						
	(Sound Tracks)							
7.	My favorite type of music is							
8.	I intensely dislike							
9.	My favorite performer is							
10.								
11.	I dislike intensely	,						
	produced by the local Armed For	ces Radio Station.						
12.	What is your favorite NETWORK	recorded program?						
13.	I dislike	NETWORK recorded program.						
14.		orded programs according to your preference.						
	5-best liked; 4-well liked; 3-good;							
	5 4 3 2 1 TURN BACK THE							
	CLOCK	o i o z i bob iiitb iiiii						
		5 4 3 2 1 BEULAH						
	CLUB							
	5 4 3 2 1 THIS IS JAZZ	5 4 3 2 1 NETWORK TIME						
	5 4 3 2 1 GARRY MOORE-	5 4 3 2 1 ARTHUR GODFREY						
	FUNNYSIDE UP							
	5 4 3 2 1 AMERICA'S POPU-	5 4 3 2 1 JOHNNY DOLLAR						
	LAR MUSIC							
	5 4 3 2 1 FIVE STAR MATINE	E 5 4 3 2 1 GUNSMOKE						
	5 4 3 2 1 N.B.C. RADIO	5 4 3 2 1 WHAT'S MY LINE						
	THEATRE							
	5 4 3 2 1 GROUCHO MARX	5 4 3 2 1 JIM AMECHE SHOW						
15.	What stateside radio programs we	ould you like to hear that are not currently be-						
	ing aired by the local Armed Force	es Radio Station?						

16 Rate the following LOCALLY produced programs that you have heard according

16. Rate the following LOCALLY produced programs that you have heard, according to your personal likes and dislikes.

	o-bes	t like	a; 4-v	ven m	kea;	5-g000	1; 2-p	oor;	T-	aisi	ikea.				
	5 4 3	3 2 1		CAL S		TING	4	5 4	3	2 1	MU	SICAL	MENU		
	5 4 3	3 2 1	NEV	WS				5 4	3	2 1	EA	RLY B	RD SHO	W	
	5 4 3	3 2 1	THE	E REC	CORD)	į	5 4	3	2 1	CO	UNTRY	JAMBO	REE	
	5 4 3	3 2 1	AFT			W/TI	HE S	5 4	3	2 1	NI	E WA	TCH		
	5 4 3	3 2 1		N TI				5 4	3	2 1	CO	NCERT	IN RHY	THM	
				NDEF				5 4	3	2 1	SOI	UNDS 1	N PAST	EL	
	5 4 3	3 2 1	KOI	RN KI	RIB			5 4	3	2 1	FE	ATURE	PAGE		
	5 4 3	3 2 1		NCHE			:	5 4	3	2 1	SU	NDAY	SERENA	DE	
	5 4 3	3 2 1	GOS	SPEL	TRA	IN		5 4	3	2 1	CO	FFEE I	BREAK		
17.				ny sug cal AF				men	da	tion	s or o	commen	ts with r	egard to in	m-
					T	ELEV	ISIO	N SI	UR	VE	Y				
1. ·	How	many	hour	s per	day	do yo	u wat	ch 7	rv'	?					
	When					ő									
		a	A	t hom	ie			c		_Ir	n the (Compan	y day roo	m	
		b	A	t the	club		. (d		_0	ther	(specify)		
3.	Do y	ou w	atch 7	rv wi	ith yo	our fa	mily?	_	_	Yes	s;	_ No.			
4.	Chec	k the	days	and t	imes	that :	you w	atch	ı T	V:					
	430-5	5-530	530-6	6-630	630-7	7-730	730-8	8-83	30	830)-99-93	80 930-	1010-1030	11-Sign (Of
MON			100												
TUE															
WEL		-													
THU															
FRI															
SAT															
SUN															
5.	Do y	you w	atch	the sp	ortin	g eve	nts on	we	ek	end	s?	Yes;	N).	
6.	Do y	ou th	ink th	at TV	is or	the a	air lon	g e	nou	ıgh	daily	?	Yes;	_ No.	
7.	If yo	our ar	iswer	is "N	o,'' w	hat ho	ours w	oul	dу	ou l	like to	have T	V operate	?	
							the at	ter	noc	n					
				Stay o			_			_					
							the w	reek	en	ds					
				All of Other											
8.	Rate						nrogr	me	20	cor	ding t	2 270110 2	reference	<u>,</u>	
0.	rate	LITE .	OHOW	mg ty	pes 0	TIV	hrogra	11112	ac	COL	unig U	your I	i erer ence		

	5-best likeu; 4-wei	i likeu, 5-good, 4	t-tair, J-uislike	eu.
	5 4 3 2 1 MYST Gunn)		5 4 3 2 1	NEWS REEL
	5 4 3 2 1 DRAM Hour)		5 4 3 2 1	WESTERNS
	5 4 3 2 1 COME	DY	5 4 3 2 1	FEATURE LENGTH MOVIES
	5 4 3 2 1 VARI Sulliva		5 4 3 2 1	SPORTS
9.				ne local AFRTV Station:
	d.			
LO.	What stateside TV would you like to h		currently aire	ed on your local AFRTV station,
11.	What types of pro (Please check)	ograms would yo	u like to see t	the local AFRTV station produce?
	CHILDREN'S	DRAMATIC	C	EDUCATION
	WESTERN MUSIC			SPORTS
	HOBBY	POPULAR	MUSIC	INFORMATION
	FILM SHOWS OF			CRAFT
		S VARIETY		SWAP SHOP
10	OTHER (Specify)			C1
12.	,			
		e per day in the		
		per day in the	early evening	hours at
	c Two	_		
13.	Rate the following			· ·
	5 4 3 2 1 BASE			COLLEGE FOOTBALL
			5 4 3 2 1	PRO FOOTBALL
	5 4 3 2 1 BOXI	NG	5 4 3 2 1	COLLEGE BASKETBALL
	5 4 3 2 1 GOLE	7	5 4 3 2 1	PRO BASKETBALL
	5 4 3 2 1 ICE I	HOCKEY	5 4 3 2 1	WRESTLING
	5 4 3 2 1 AUTO	RACES	5 4 3 2 1	TRACK AND FIELD EVENTS
14.	What is your bes	t-liked sporting e	event on TV?	
15.	What is your leas	t-liked sporting e	event on TV?	
16.	Do you mind was and you know the			, even though they are outdated No.
17.		suggestions, re		as, or comments with regard to im-

NEWS

1.	Which tv	vo of the following news source	es best keep you i	nformed on world events?
	a.	Army-Navy-Air Force Times	BEST SO	URCE
	b.	Civilian Newspapers		
	c.	Civilian Magazines		
	d.	Troop Information Periods	NEXT BE	ST SOURCE
	e.	Post Bulletins		
	f.	Post Newspapers		
	g.	Stars and Stripes	POOREST	SOURCE
	h.	Local Armed Forces Radio Station		
	i.	Conversations with fellow service men		
	j.	Local Armed Forces TV Station		
	k.	Other (specify)		1.
3.	your per 5-best li 5 4 3 2 5 4 3 2 5 4 3 2	Coverage is sufficient as Other (specify) e following types of NEWS that resonal preference. ked; 4-well liked; 3-good; 2-po 1 WORLD EVENTS 1 NATIONAL EVENTS 5	on radio and TV. radio, but increase is. t you like to resor; 1-disliked. 4 3 2 1 POST 4 3 2 1 SPOR 5 4 3 2 1 EXPI	ase newscasts on TV. e newscasts on radio. ad and hear according to NEWS
5.	a. b. c. d e Where	Read it thoroughly each common Read it thoroughly each common Read it each day. The seldom read it. Read it thoroughly each common Read it each day. Seldom read it. Never read it. do you obtain your copies of to read up at my unit mail room.	ch day. se I never get it. he local Post New c	spaper? Picked up at the Commissary. Given to me by a
	b	o Picked up at the PX Snack Bar.	α	friend.

e	e At work.	Otner	(specify)
f	f Delivered to my home.		
6.	6. Which of the following is your primary source of	obtai	ning news on post?
	a Local post newspaper. d.	S	tars and Stripes.
	b Local Armed Forces Radio e.	0	ther (Specify).
	Station.		
	c Local Armed Forces TV Station.		
7.	7. Rate following TV information programs accord	ing to	your personal preference.
	5-best liked; 4-well liked; 3-good; 2-poor; 1-disliked	d.	
	5 4 3 2 1 CHET HUNTLEY 5 4 3 2	1 T	WENTIETH CENTURY
	5 4 3 2 1 MEET THE PRESS 5 4 3 2	1 T	HE BIG PICTURE
	5 4 3 2 1 HARVEST 5 4 3 2	1 A	DVENTURE TOMORROW
	5 4 3 2 1 TIME PRESENTS 5 4 3 2	1 Y	OU ARE THERE
	5 4 3 2 1 CORONET FILMS 5 4 3 2	1 M	OVIETONE NEWSREEL
8.	8. Your best liked TV information program is		
9.	9. Your least liked TV program is		
10.	 How effectively have you been informed by the Station regarding events such as: THE SUMM PLANE INCIDENT, etc. 	local A	Armed Forces Radio and TV ONFERENCE and THE U-2
	The information I received from this source astand the purpose of these events.	e mad	e it possible for me to under-
	The information was fairly good but did b purpose of these events.	not f	ully make me aware of the
	I don't remember getting any significant radio and television, but I was able to kee c newspapers and magazines.		
	The information was fairly good but most d other sources.	of m	y understanding came from
	I don't remember getting any information e or television.	on th	nis subject from either radio
	I don't remember getting any information f television, or any other source.	on t	his subject from radio and
11.	 COMMENTS — What are your recommendati news coverage by the local Armed Forces Radio local post newspaper: 	ons, o	complaints or comments on Television Station, or by the